Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gatheringand maintaining the data needed and completing and reviewing the collection of information. Send comments regarding this burden estimateor any otherappect of this collection of information, including suggestions for reducing this burden, to Washingtor Headquarters Services, Directorate for Information Derations and Reports, 1215 Jeffers on Davis Highway Suite 1204, Arlington, VA 22202—4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704—0188), Washington, DC 20503.

Logistics Management Information (LMI) Data Product(s)

DI-ALSS-81529

2. IDENTIFICATION NUMBER

# 3. DESCRIPTION / PURPOSE

The LMI Data Product(s) consists of data that a requiring authority needs to develop their internal materiel management processes. This data contains information in the areas of provisioning, cataloging, packaging, and support equipment.

4. APPROVAL DATE (YYMMDD)

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

6a. DTIC APPLICABLE

6b. GIDEP APPLICABLE

961118

A/TM

# 7. APPLICATION / INTERRELATIONSHIP

- 7.1 This DID contains the format and content preparation instructions for LMI Data Product(s) required by Appendix B of MIL-PRF-49506.
- 7.2 This DID is applicable to the acquisition of military systems and equipment.
- 7.3 The delivery method (e.g., on-line access, tape, floppy, etc.) is outside the scope of MIL-PRF-49506 and must be addressed separately.

APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

A7215

### 10 PREPARATION INSTRUCTIONS

- 10.1 Reference Documents. The applicable issue of the documents cited herein, including their approval dates and the dates of any applicable amendments, notices, and revisions. shall be specified in the contract.
- 10.2 Format. The Data Product(s) must be in accordance with the associated format in Appendix B of MIL-PRF-49506.
- 10.3 Content. The content of Data Product(s) is described in Appendix B, MIL-PRF-49506. The Data Product Worksheets (Figure 2, MIL-PRF-49506), or some other requirements identification tool contained in the contract, shall specify the selected data.

# 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed and completing and reviewing the collection of information, send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washing ton Headquarters envices, Directorate or Information Derations and Reports, 1215 Jeffers on Davis High way Suite 1204, Arlington, VA 22202–4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704–0188), Washington, DC 20503.

I. TITLE 2. IDENTIFICATION NUMBER

Logistics Management Information (LMI) Summaries

DI-ALSS- 81530

# 3. DESCRIPTION / PURPOSE

The LMI Summaries consist of information that a requiring authority can use to perform logistics planning and analysis, assess design status, influence program decisions, and verify contractor performance meets system supportability requirements.

4. APPROVAL DATE (YYMMDD) 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) 6a. DTIC APPLICABLE 6b. GIDEP APPLICABLE (YYMMDD) 61118 A/TM

### 7. APPLICATION / INTERRELATIONSHIP

- 7.1 This DID contains the format and content preparation instructions for LMI Summaries required by Worksheet 1 (Figure 1) of MIL-PRF-49506, or some other requirements identification tool.
- 7.2 This DID is applicable to the acquisition of military systems and equipment.
- 7.3 The delivery method (e.g., on-line access, tape, floppy, etc.) is outside the scope of MIL-PRF-49506 and must be addressed separately.

APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

A7216

# 10. PREPARATION INSTRUCTIONS

- 10.1 <u>Reference Documents</u>. The applicable issue of the documents cited herein, including their approval dates and the dates of any applicable amendments, notices, and revisions, shall be specified in the contract.
- 10.2 Format. The formats for LMI Summaries are not dictated by MIL-PRF-49506, but are left to the discretion of the requiring authority and the contractor.
- 10.3 <u>Content</u>. Worksheet 1 (Figure 1) of MIL-PRF-49506, or some other requirements identification tool contained in the contract, identifies the required LMI Summaries, desired information per LMI Summary, and associated guidance.

The Data Product Worksheets (Figure 2, MIL-PRF-49506), or some other requirements identification tool contained in the contract, shall specify the selected data.

# 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

DATA	ITEM	DESCRIPTION

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, Va 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

1. TITLE 2. IDENTIFICATION NUMBER

# COMMERCIAL DRAWINGS AND ASSOCIATED LISTS

**DI-DRPR-81003A** 

- 3. DESCRIPTION/PURPOSE
- 3.1 Commercial Drawings and Associated Lists define commercial items acquired by the Department of Defense.

4. APPROVAL DATE 970521	5. OFFICE OF PRIMARY RESPONSIBILITY(OPR)	6a. DTIC REQUIRED	6b. GIDEP REQUIRED
	AR		

- 7. APPLICATION/INTERRELATIONSHIP
- 7.1 This Data Item Description (DID) contains the format and content preparation instructions for Commercial Drawings and Associated Lists resulting from the work task described in 3.6.4 of MIL-DTL-31000A.
- 7.2 This DID is applicable to acquisitions of military systems, equipment, and components. Its use is limited by the requirements of the Defense Federal Acquisition Regulation Supplement, Subpart 227. Before acquiring Commercial Drawings and Associated Lists, the acquiring activity should evaluate the contractor's drawing package and engineering

8. APPROVAL LIMITATION
9a. APPLICABLE FORMS
9b. AMSC NUMBER
D7277

- 10. PREPARATION INSTRUCTIONS
- 10.1 <u>Reference Documents</u>. The applicable issue of documents cited herein, including their approval dates and the dates of applicable amendments, notices, and revisions, shall be as cited in the contract.
- 10.2 <u>General.</u> Commercial Drawings and Associated Lists shall be in accordance with MIL-DTL-31000Aand the Selection Work Sheet incorporated into the contract.
- 10.3 Format. Drawings and associated lists shall be in the contractor's or original supplier's format.
- 10.4 <u>Content.</u> Commercial Drawings and Associated Lists shall provide sufficient information to permit Government maintenance, modification, and engineering analysis of commercial items.
- 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

# DI-DRPR-81003A

Block 7, Application/Interrelationship (continued)

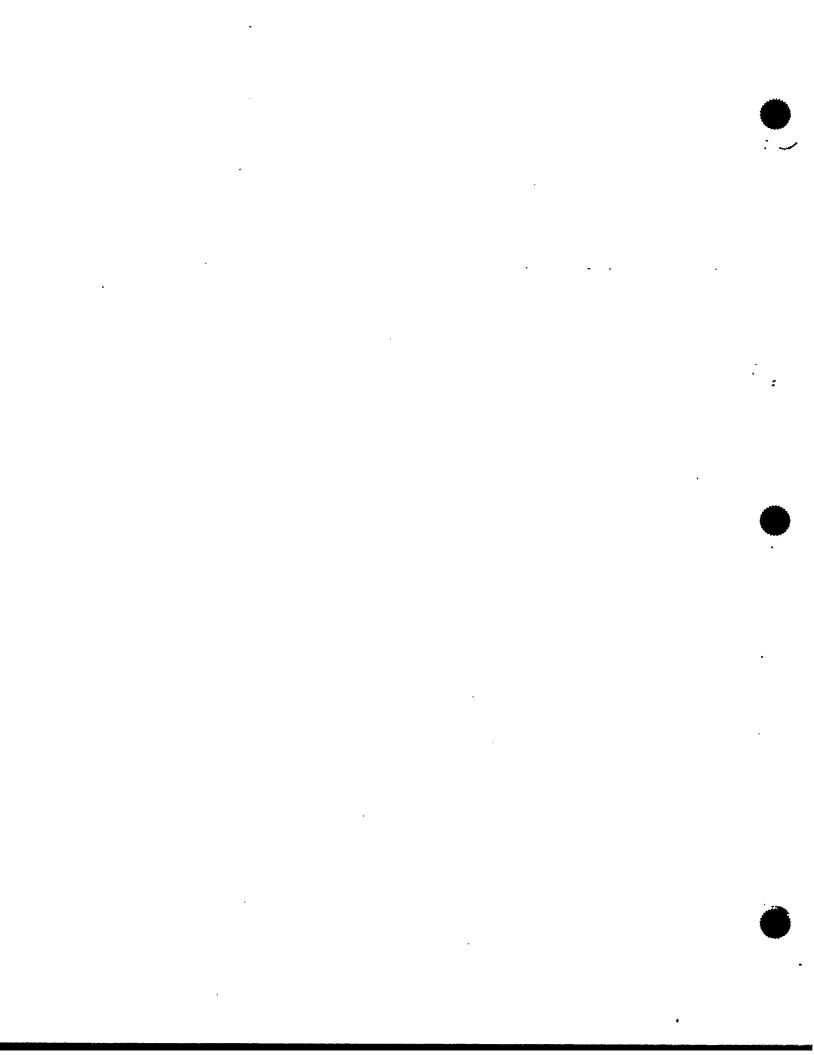
documentation practices to determine if the data will be satisfactory for the Government's intended uses.

- 7.3 This DID should be tailored to the minimum data requirements of the applicable contract.
- 7.4 This DID supersedes DI-DRPR-81003, which superseded DI-CMAN-80784.
- 7.5 This DID is related to DI-DRPR-81000A, DI-DRPR-81001A, and DI-DRPR-81002A.

Form Approved OMB No. 0704-0188

Public reporting harden for this collection of information is estimated to everage 110 hours per corpuses. Including the time for reviewing instructions, marching existing data neurons, gathering and insumation; the data second, and completing and everage the collection of information. Sond commerce regarding this harden extends or only other electing approach of this englicitation, including an approach for processors for processors for formation Operations and Reports. 1215 Jeffernor David Hydrogen 2018; 1214, Artigayer 247, and to ter Office of Management and Artigayer 247.

TILE			2. IDENTIFICATION	NUMBER
INSTALLATION CON	TROL DRAWINGS		DI-DRPR-81	242
3. DESCRIPTION/PURPOSE				
	n Control Drawings progs for the installation			
	· · · · ·	, .	- ,	
4. APPROVAL DATE	5. OFFICE OF PRIMARY RESPON	NSIBILITY (OPR)	64 DTIC APPLICAB	LE 6b. GIDEP APPLICABLE
(YYMMDD)	N/SEA 06K3	,		
911018 7. APPLICATION/INTERRELA			<u></u>	
described by 3.3	of MIL-D-23140.  applicable to the acc	puisition of electro	nic systems ar	nd equipment.
B. APPROVAL LIMITATION		9a. APPLICABLE FORMS		9b. AMSC NUMBER
				N6685
D. PREPARATION INSTRUCT	IONS	<u> </u>		·
including their revisions, shall  10.2 Format. I in MIL-D-23140.  10.3 Content. mechanical, and for the installa	documents. The application approval dates and dat be as specified in the installation Control Description of electronic systems as specified in	te of any applicable ne contract.  rawings shall be in Drawings shall set for stallation activities tems and equipment.	amendments, in the format specific constitution of the specific constituti	notices, and ecified trical, physical, plans and drawings tent
10.3.1 Types of the contract.	drawings. The speci	fic type(s) of drawi	ngs shall be	as specified in
11 DISTRIBUTION STATEME	NT ATEMENT A: Approved f			



# DATA ITEM DESCRIPTION Form Approved CMB No. 0704-0188

2. TITLE 1. IDENTIFICATION NUMBER

DI-ENVR-80708

3. DESCRIPTION/PURPOSE

SHOCK TEST REPORT

3.1 The Shock Test Report provides the results of equipment shock tests, post-shock test inspections and functional tests. The report is used to determine if tested items meet the requirements of MIL-S-901 (MAYY).

4. APPROVAL DATE (YYMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a. DTIC APPLICABLE	6b. GIDEP APPLICABLE
881121	SH		

### 7. APPLICATION/INTERRELATIONSHIP

- 7.1 This data item description (DID) contained the format and content preparation instructions for the Shock Test Report resulting from the work task described by 3.1.8.6, 3.1.12, and 4.4 MIL-S-901 (NAYY).
- 7.2 This report applies whenever shock testing equipment in accordance with MIL-S-901 (NAVY).
- 7.3 This data item description supersedes UDI-T-23753 and UDI-T-23754.

(Continued on Page 2)

8. APPROVAL LIMITATION 98. APPLICABLE FORMS 9b. AMSC NUMBER
N4574

# 10. PREPARATION INSTRUCTIONS

- 10.1 Reference documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.
- 10 2 Content Requirements.
- 10 2.1 General. Shock test reports shall contain the following three sections:
  - a. <u>Section 1. Test installation and conduct</u>. This section describes the test installation, conduct, and results of the test, including the applicable information of 10.3. This section shall also include:
    - (1) Description of material, size, and type of hold-down bolts (and of any other hold-down or locating devices) used to secure or locate the tested items to their foundations or test fixtures during shock tests.
    - (2) Clear photographs of each equipment mounting configuration used during the shock test.
    - (3) A drawing of the fixture. Modifications to standard fixtures may be submitted as marked-up drawings.
    - (4) If shock test instrumentation is employed, a description of such instrumentation and a clear copy of data recorded during the test shall be submitted with the report.
    - (5) Reference to the applicable equipment military specifications or acquisition document including the applicable revision and date of issue shall be submitted with the report.
  - b. <u>Section 2. Post-test inspection</u>. This section describes the conduct and results of the post-test inspection including the applicable information of 10.3.

(Continued on Page 2)

# 11. DISTRIBUTION STATEMENT

A: Approved for public release; distribution is unlimited.

# Block 7, Application/Interrelationship (Continued)

7.4 Sections 1 and 2 of the report will include input provided by the shock test facility and the activity performing post-shock test inspection. If the shock test facility and post-test inspection facility are other than the contractor, arrangements to assure that this input is obtained are required.

### Block 10. Preparation Instructions (Continued)

- Section 3. Acquisition requirements. This section states the applicable ordering data specified in acquisition documents. This may be accomplished by extracting pertinent pages or sections of the purchase specifications or acquisition document and including this material as an appendix to the report. This section shall include the contractor's recommendations for shock test acceptance of the item tested. For each item of damage (or malfunction) which occurred as a result of shock testing, the contractor shall either recommend and rationalize design modifications which the contractor believes are required to correct any deficiencies found during the test or the post-test inspection in order to achieve acceptable shock resistance, or shall illustrate that the damage or malfunction in question does not violate applicable shock test acceptance criteria. Where matters involving shock test failures were resolved with the acceptance authority prior to submission of the test report (see 3.1.11 of MIL-S-901), a record of these agreements shall include detailed descriptions of any damage incurred during each blow or shot and, where practicable, clear photographs of each instance of damage. This section shall also describe in detail any design modifications, repairs, or adjustments made to the item during shock tests or prior to post-test functional testing, and shall provide the equipment identification information delineated in 10.3.5.
- 10.3 Specific requirements. Each piece of equipment to be tested shall be identified with the information delineated in 10.3.5. Tests shall be numbered and dated.
- 10.3.1 Lightweight shock machine test. The following information shall be included for all lightweight shock machine tests as defined by MIL-S-901 (MAVY):
  - Type of test fixture as defined by MIL-S-901 (MAVY).
    - (1) If using type 4C indicate the mounting platform

    - (2) If using type 6E indicate panel number (3) If nonstandard provide photographs
  - Total weight on anvil plate.
  - Instrumentation.
    - (1) Gauge type
    - (2) Location
    - (3) Orientation
    - (4) Results
  - Monitored performance. See Table I for a sample tabulation format for required information.
    - (1) Blow number
    - (2) Drop feet
    - (3) Axis
    - (4) Operating mode
    - (5) Reference measurements
    - (6) Post-test measurements or corrections
  - Survey findings noting any damage and providing damage photographs.
  - Modifications, if any, accomplished prior to or during test with applicable rationale, description, etc. f.
  - If witnessed by a designated Government representative, the report shall include signature of witness and certification of test report.
  - Certification of report by the test laboratory.
  - Romarks.

lock 10, Preparation Instructions (Continued)

TABLE	TABLE I. LIGHTWEIGHT SHOCK MACHINE TEST MONITORED PERFORMANCE.						
Blow No		Operating mode (on, off, open Reference c closed, etc.) weasureme					
2 3	1 3						
3 4 5	7 1 3						
6	5						
8 9	3 5						
1		unperes, revolutions per min ces, bolting torques, etc.	ute, pounds per square inch, alignment,				
2		ng, cracking, short-circuiti nced, etc.	ng, separating, unlatching,				

10.3.2 <u>Medium weight shock machine test</u>. The following information shall be included for all medium weight shock machine tests as defined by MIL-S-901 (NAVY):

- a. Type of test fixture. If nonstandard, include description and photographs.
- b. Total weight of anvil table (for vertical and inclined tests).
- c. Instrumentation
  - (1) Gauge type
  - (2) Location
  - (3) Orientation
  - (4) Results
- d. Monitored Performance. See Table II for a sample tabulation format for required information.
  - (1) Blow number
  - (2) Group number
  - (3) Drop feet
  - (4) Operating mode
  - (5) Reference measurements
  - (6) Post-test measurements or conditions
- e. Survey findings, noting any damage and providing damage photographs.
- f. Modifications, if any, accomplished prior to or during test with applicable rationale, description, sketches, etc.
- g. Remarks.
- h. If witnessed by a designated Government representative, the report shall include witness' signature and certification of test report.
- i. Certification of report by test laboratory.

Block 10, Preparation Instructions (Continued)

Blow No	Operating mode Post-test Group Drop (on, off, open Reference measurements Researches) Ro Feet closed, etc.) measurements or conditions
1	I Vertical II
2	Vertical III
3	Vertical
4	Inclined <sup>3</sup>
5	Inclined <sup>3</sup>
6	Inclined <sup>3</sup>
	1/ Volts, amperes, revolutions per minute, pounds per square inch, alignment, clearances, bolting torques, etc.
	2/ Yielding, cracking, short-circuiting, separating, unlatching, unbalanced, etc.
	3/ Provide angle of inclination

10.3.3 Heavyweight shock test on a floating shock platform (FSP) or large floating shock platform (LFSP). The following information shall be included for all FSP and LFSP tests as defined by MIL-S-901 (NAVY):

- Test platform as defined by MIL-S-901 (NAVY).

  - (1) FSP (2) LFSP
- b. Test fixture description including details of the installations. Photographs or sketches of the foundation and installation.
- Total weight on the platform.
- d. Instrumentation.
  - (1) Gauge type (2) Location

  - (3) Orientation
  - (4) Results
- Monitored performance. See Table III for a sample tabulation format for required information.
  - (1) Shot number
  - (2) Range
  - (3) Operating mode
  - (4) Reference measurements
  - (5) Post-test measurements or conditions
- Survey findings, noting any damage and include damage photos.
- Modifications, if any, accomplished prior to or during test with applicable rationate, description, sketches, etc.
- h. Remarks.
- Certification signature by test Laboratory and witness and certification signature by Government activity as to correctness of report.

.lock 10, Preparation Instructions (Continued)

TABLE	TABLE III. HEAVYWEIGHT SHOCK MACHINE TEST MONITORED PERFORMANCE.						
Shot	<u>Range</u> FSP LFSP	Operating mode (on, Post-test off, open Reference measurements or conditions					
1	40 110						
2	30 80						
3	<b>25</b> 65						
4	20 50						
1/ 2/	I/ Volts, amperes, revolutions per minute, pounds per square inch, alignment, clearances, bolting torques, etc.						

- 10.3.4 Post-shock test testing and inspection. The following information shall be included for all tests:
  - a. Identification of item being inspected through the use of such information as component name, manufacturer, and drawing number.
  - b. Type of shock test performed.
    - (1) Machine
    - (2) Platform
  - c. Inspection and functional tests. Type of test accomplished and approval by the appropriate inspectors.
  - d. Repairs which were necessary during tests.
  - e. Condition of item being tested/inspected.
    - (1) Breakage
    - (2) Deformation
    - (3) Misalignment
    - (4) Unbalance
    - (5) Yielding
    - (6) Cracks
    - (7) Momentary malfunction
  - f. Disposition of unit.
  - g. Signatures certifying the report as correct.
    - (1) Test laboratory
    - (2) Contractor
    - (3) Government representative
- 10.3.5 Equipment identification and test installation requirements. The following information shall be included for all tests:
  - a. Item.
    - (1) Name
    - (2) Type
    - (3) Nomenclature
    - (4) Rating
    - (5) Service
    - (6) Military specification and technical manual number
  - b. Manufacturer (name and address).
  - Model number and serial number.
  - d. Size or capacity (if applicable).
  - e. Plan number (sectional assembly and outline; revision and date).

### Block 10, Preparation Instructions (Continued)

- f. Approximate overall size of equipment.
  - (1) Length
  - (2) Height
  - (3) Width (4) Diameter
- g. Weight (wet, dry and total weight including test fixture, wet and dry).
- h. Height of center-of-gravity above base of equipment.
- i. Contract or purchase order number.
- j. Requirements of MIL-S-901 (NAVY).
  - (1) Test category (2) Grade

  - (3) Equipment class (4) Shock test type (5) Mounting Location
- k. Mounting abourd ship represented during shock test.

  - (1) Plane (2) Orientation
- 1. Hold-down facteners or locating devices used for attachment of items to their foundation or test fixture during shock tests.
  - (1) Grade
  - (2) Size

  - (3) Material (4) Specifications
- m. Hold-down bolt torque.
- Description of resilient mounts, if used.

  - (1) Size (2) Type
  - (3) Location
  - (4) Specification
- o. Major components and attached items in test.
- p. Test laboratory and address.
- 10.4 Format requirements. The shock test report shall be typed in the contractor's format on 8 1/2" x 11" sheets (metric size A4).

Form Approved CHS No. 0704-0188

2. TITLE

HIGH-IMPACT SHOCK TEST PROCEDURES

1. IDENTIFICATION NUMBER

DI-ENVR-80709

### DESCRIPTION/PURPOSE

3.1 High-impact shock test procedures outline the steps that the contractor proposes to demonstrate the resistance of the system being tested to high-impact mechanical shock.

4. APPROVAL DATE (YYMOD)

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

68. BTIC APPLICABLE

6b. GIDEP APPLICABLE

881121

SH

7. APPLICATION/INTERRELATIONSHIP

- 7.1 This data item description (DID) contains the format and content preparation instructions for the High-Impact Shock Test Procedures resulting from from the work task described by 3.1.1.2, 3.1.8, 3.1.9, and 3.1.10.1 of MIL-S-901 (NAVY).
- 7.2 This request applies whenever equipment or systems are to be shock qualified by high-impact shock testing in accordance with the requirements of MIL-S-901 (NAVY).
- 7.3 This data item description supersedes UDI-T-23755, UDI-T-23757A, and UDI-T-23759A

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

N4575

10. PREPARATION INSTRUCTIONS

- 10.1 Reference Documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.
- 10.2 Content requirements. The test procedure shall contain the following information:
- 10.2.1 Equipment identification. The request shall include the following identification information.
  - Item.
    - (1) Name
    - (2) Type
    - (3) Nomenclature
    - (4) Rating
    - (5) Service
    - (6) Military specification and technical manual numbers
  - b. Manufacturer (name and address).
  - c. Model number and serial number.
  - d. Size or capacity (if applicable).
  - e. Plan numbers (sectional assembly and outline; revision and date).
  - f. Approximate overall size of equipment.
    - (1) Langth
    - (2) Height (3) Width

    - (4) Diameter

(Continued on Page 2)

# 11. DISTRIBUTION STATEMENT

A: Approved for public release; distribution is unlimited.

### Block 10, Preparation Instructions (Continued)

- g. Weight (wet, dry, and total weight including test fixture, wet and dry).
- h. Height of center-of-gravity above base of equipment.
- i. Contract or purchase order number.
- j. Requirements of MIL-S-901 (MAVY).
  - (1) Test category
  - (2) Grade
  - (3) Equipment class
  - (4) Shock test type
  - (5) Mounting Location
- k. Mounting abound ship represented during shock test.
  - (1) Plane
  - (2) Orientation
- 1. Hold-down feateners or locating devices used for attachment of items to their foundation or test fixture during shock tests.
  - (1) Grade
  - (2) Size
  - (3) Naterial
  - (4) Specifications
- m. Hold-down bolt torque.
- n. Description of resilient mounts if used.
  - (1) Size
  - (2) Type
  - (3) Location
  - (4) Specification
- Najor components and attached items in test (name, identification, manufacturer).
- p. Test laboratory and address.
- q. Test instrumentation and monitoring equipment, if any.

# 10.2.2 Test procedures.

- a. Purpose and objectives of tests to be conducted.
- b. The activity whose representative(s) will witness both the shock test and the post-shock test inspection and functional testing (see 4.4 of MIL-S-901 (NAVY)).
- c. Alternative representative(s) (e.g., DCASMA, SUPSKIP, NAVPRO, AFPRO, project engineer) who may witness tests in b. above in the event the specified witness cannot schedule attendance.
- d. Step-by-step test procedures and limits.
- e. Test sequence.
- f. Simulation of items during shock test.
- g. Test item operational requirements.
- h. Fixture drawings for the test fixture required for conducting heavyweight shock tests and the justification for the fixture secting the requirements of MIL-S-901 (MAVY).
- i. Requirements, if any, for on-site evaluation of test instrumentation results. All test instrumentation data evaluations needed to show compliance with acceptance criteria (including criteria, if any, regarding momentary malfunctions) shall be identified for on-site performance to ensure recognition of discrepant conditions before proceeding with additional shock blows or shots.
- 10.2.3 Detailed post-shock functional testing procedures. Include the following in separate sections for each component:
  - a. Functional tests to include:
    - (1) Imput-output of component or equipment
    - (2) Operating temperatures (bearing and coil winding)
    - (3) Cyclic operations to determine compliance with design specifications

- ock 10, Preparation Instructions (Continued)
  - Hydrostatic tests to include:
    - (1) Hydraulic, pneumatic, and fluid systems equipment (2) Demonstration of strength

    - (3) Leekage
  - c. Electrical tests to include:
    - (1) Insulation breakdown (shorts)
    - (2) Electrical continuity
- 10.2.4 <u>Comparison with operational requirements</u>. Define the procedures for reporting the results of the comparison of the specified test item operational requirements contained in 10.2.2.g with the results of the post-shock functional testing.
- 10.2.5 Detailed post-shock inspection procedures and criteria. Include the inspection porcedures in separate sections for each component to determine:
  - **a.** Breakage.
  - b. Deformation.
  - C. Yielding.
  - Misalignment.
  - e. Unbalance.
  - f. Cracks (dye penetrant, radiographic, or magnetic particle).
  - Separation.
  - Critical tolerance clearances. h.
  - Boiting torques.
  - .2.6 Pre-shock test vs. post-shock test configuration comparison. Define the procedures for reporting the results of the amparison between pre-shock tested component configuration and post-shock tested component configuration.
- 10.2.7 Shock test acceptance criteria. Include grade A shock test acceptance criteria if such is not specified by applicable acquisition documents. Include the following:
  - Minimum acceptable performance parameters.
    - (1) Alignment
    - (2) Dielectric strength
    - (3) Pressure-tight integrity
    - (4) Deformation
    - (5) Clearances
  - b. Extent of momentary malfunction, if permitted.
  - Degree of permanent functional impairment allowed.
- 10.3 Formet requirements. The procedures shall be prepared in the contractor's formet on 8 1/2" X 11" sheets (metric size M).

Form Approved ONB No. 0794-0188

2. TITLE

SHOCK QUALIFICATION DATA SHEET

1. IDENTIFICATION NUMBER

DI-ENVR-80710

### 3. DESCRIPTION/PURPOSE

3.1 The Shock Qualification Data Sheet provides identification of the results of equipment shock qualification, status of qualification, method of qualification, and a record of the qualification. The report is used to record items shock qualified in accordance with the requirements of MIL-S-901 (NAVY) and NAVSEA 0908-LP-000-3010.

4.	APPROVAL DATE (YYMOD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	60. DTIC APPLICABLE	6b. GIDEP APPLICABLE
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### 7. APPLICATION/INTERRELATIONSHIP

- 7.1 This data item description (DID) contains the format and content preparation instructions for the Shock Qualification Data Sheet resulting from the work task described by 3.1.12 and 3.2.2 MIL-S-901 (NAVY) and by NAVSEA 0908-LP-000-3010.
- 7.2 This report applies whenever equipment is shock qualified in accordance with MIL-S-901 (MAVY), NAVSEA 0908-LP-000-3010, or when equipment identical to previously shock qualified equipment is used.
- 7.3 This data item description supersedes UDI-T-23761A.

, 8.	APPROVAL LIMITATION	9a.	APPLICABLE FORMS	9b.	AMSC NUMBER
1		}			N4576

# 10. PREPARATION INSTRUCTIONS

10.1 Reference documents. The applicable issue of the documents cited herein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.

### 10 2 Content Requirements.

- 10 2.1 General. The following information shall be included in the shock qualification data sheet:
  - a. Item. This section specifically describes the item tested or otherwise shock qualified.
  - b. Manufacturer. This section shall include identification of the equipment manufacturer and address.
  - c. <u>Model</u>. This section describes the specific model of the item shock qualified including all applicable information regarding model numbers, serial number, type, etc.
  - d. Size/Capacity. This section states the applicable size, capacity, or both of the shock qualified item.
  - e. <u>Drawing Number</u>. This section identifies the manufacturers drawing number for the item shock qualified. If the item is covered by more than one drawing number then either the top level drawing number, a set of drawing numbers, or both should be referenced. Included with this shall be the actual revision and date of the revision to which the equipment was assembled.
  - f. <u>Military Specification</u>. This section identifies the military specification, if any, that the equipment was developed in accordance with.
  - g. <u>Ship</u>. This section ildentifies the ship, ships, or ship classes that this equipment was shock qualified for.

### 1. DISTRIBUTION STATEMENT

A: Approved for public release; distribution is unlimited.

(Continued on Page 2)

### Block 10, Preparation Instructions (Continued)

- h. <u>Service</u>. This section identifies the intended service of the item to be qualified; i.e. high pressure steam, lube oil systems, electrical systems, etc.
- Contract Number. This section identifies the U. S. Government contract number under which this equipment was procured and shock qualified.
- J. Shock Test Facility and Report Number. This section identifies the following:
  - (1) For equipment shock qualified by test, the facility that conducted the shock test and the shock test facilities report number shall be identified. In addition the reference to any supplemental reports, including the post-shock test report, shall also be identified.
  - (2) For equipment shock qualified by shock test extension, the facility that conducted the shock test of the original equipment and the original equipment shock test report number shall be identified. Additionally the original post shock test report, any other supplemental reports, and the comparative analysis which substantiates the request for shock test extension shall be included.
  - (3) For equipment shock qualified by analysis, or extension based upon analysis, the identification of the activity that conducted the analysis and a reference to the analysis report shall be included. The report which documents the mathematical model utilized during the analysis shall also be identified. Furthermore if this request is based upon extension from previous analysis the report which substantiates the request for shock qualification extension shall also be identified.
- k. Previous shock test approval reference. If the item is shock qualified based upon a request for extension, either shock test extension in accordance with MIL-S-901 (MAVY) or shock analysis extension in accordance with MAVSEA 0908-LP-800-3010, the previous shock qualification letter of approval shall be identified in this section.
- Test Category. The category of shock qualification, either lightweight, medium weight or heavyweight as
  defined by MIL-S-901 (NAVY), or analysis in accordance with NAVSEA 0908-LP-000-3010, shall be identified.
- m. Shock Grade. The shock grade of the equipment as defined by MIL-5-901 (NAVY) shall be identified.
- n. Equipment Class. The class of the equipment as defined by MIL-S-901 (NAVY) shall be identified.
- o. Shock Test Type. The shock test type as defined by MIL-S-901 (NAVY) shall be identified.
- p. <u>Mounting Location</u>. The mounting location as defined by MIL-S-901 (NAVY) for shock tested equipment or by NAVSEA 0908-LP-000-3010 for equipment qualified by analysis shall be identified.
- q. Shipboard mounting plane represented during shock test. If the equipment is shock qualified based upon either shock test or shock test extension the mounting plane that was represented during the test shall be identified. The mounting options include:
  - (1) Base
  - (2) Top
  - (3) Front or face
  - (4) Combination
  - (5) Back
  - (6) Other, specify the mounting orientation represented during the test.
- r. <u>Mounting orientation of item relative to ship's fore-and-aft axis</u>. For those items shock tested as medium weight or heavyweight the mounting orientation of the item relative to the ship's fore-and-aft axis should be specified.
- s. <u>Remarks/Approval Limitation</u>. Any pertinent remarks or limitations of the shock qualification shall be included within this section of the data sheet.
- t. Approval. The complete reference to the Government's letter of approval shall be moted herein.
- 10.2 <u>Documentation requirements</u>. Complete copies of shock test reports, requests for shock test extension, mathematical model reports, dynamic analysis reports, and any other supporting documentation shall be maintained to verify the data included within the shock qualification data sheet. Additionally copies of all Government approval letters shall be maintained. Copies of Shock Test Acceptance Information form. Figure 19 of MIL-S-901 (MAYY) shall also be maintained.
- 10.3 Format requirements. The shock qualification data sheet shall be typed in the contractor's format on 8  $1/2^{\mu} \times 11^{\mu}$  sheets (metric size A4).

Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for

reducing this burden, to Washington Headquaters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington VA. 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC. 20503. 1. TITLE 2. IDENTIFICATION NUMBER

Proposed Spare Parts List

DI-ILSS-80134A

### 3. DESCRIPTION/PURPOSE

- 3.1 The Proposed Spare Parts LIst identifies the contractor's recommended spare parts required to maintain a system under a given set of circumstances and duration.
- 3.2 The Proposed Spare Parts List is used to determine spare parts stocking levels.

ľ	4. APPROVAL DATE	5. OFFICE OF PRIMARY RESPONSIBILITY	(OPR)	6a. DTIC APPLICABLE	6b. GIDEP APLLICABLE
	( <i>YYMMDD</i> ) 901106	F/AFCC-TSPMO			

### 7. APPLICATION/INTERRELATIONSHIP

- 7.1 This Data Item Description contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement for this data included in the contract.
- 7.2 The content shall identify the time period (e.g. 180 days) and the conditions of operation (e.g., Extensive road tests in accordance with Vehicle Test Plan A2345 at two different sites with five vehicles located at each site) for which the proposed spare parts are required (reference 10.3 h. below).
- 7.3 This DID supersedes DI-ILSS-80134.

8. APPROVAL LIMITATION	9a. APPLICABLE FORMS	9b. AMSC NUMBER
•		F5035

# 10. PREPARATION INSTRUCTIONS

- 10.1 General. The Proposed Spare Parts List shall contain the contractor's recommended quantities of every type of spare part required for the system, to include all consumable and expendable items. This list shall explain any assumptions, formulas, or models used by the contractor in the creation of the list.
- 10.2 Format. The Proposed Spare Parts List format shall be arranged in a comprehensive presentation of components, subassemblies, and assemblies as selected by the contractor.
- 10.3 Content. The Proposed Spare Parts List content shall include the following:
  - a. Complete item name.
  - b. Prime manufacturer's or vendor's part number.
  - c. Federal Supply Code of Manufacturers (FSCM)
  - d. National Stock Number (NSN)
  - e. Quantity per end item.
  - f. Unit of issue (e.g., each, feet, lot).
  - g. Estimated unit price.
  - h. Recommended quantity to sustain operation for the time period and under the conditions stated in the contract.
  - i. Alpha numeric numbering of items on list.
  - j. Shelf life (if not indefinite).
  - k. Mean-Time-Between-Failure of each item

### 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approval for public release; distribution is unlimited.



# DI-ILSS-80134A

# Block 10, Preparation Instruction (Continued)

- 1. Production lead time for each item.
- m. Explanatory narrative which describes the recommended quantity to take into account multiple end items at a single location.







Form Approved OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 110 hours per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Sulte 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188), Washington, DC 20503.

2. IDENTIFICATION NUMBER Engineering and Technical Services Accomplishment Report DI-MGMT-80061A 3. DESCRIPTION/PURPOSE 3.1 The Engineering and Technical Services Accomplishment Report records progress on engineering tasks, services, and contractor internal control schedules utilized to manage and control the Engineering Services activities. (Continued on Page 2) 4. APPROVAL DATE 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) 6a. DTIC APPLICABLE 6b. GIDEP APPLICABLE (YYMMDD) A/MICOM 7. APPLICATION/INTERRELATIONSHIP
7.1 This Data Item Description (DID) contains the data format and content preparation instructions for the data product generated by the

- specific and discrete task requirement as delineated in the contract.

  7.2 This DID shall be used in conjunction with DI-MISC-80748,
- 7.3 This DID supersedes DI-MGMT-80061 and DI-MGMT-80893.

Engineering Services Memorandum. ~

8. APPROVAL LIMITATION 9a. APPLICABLE FORMS 9b. AMSC NUMBER
A6091

# 10. PREPARATION INSTRUCTIONS

- 10.1 <u>Format</u>. The Engineering and Technical Services Accomplishment Report format shall be contractor selected. Unless effective presentation would be degraded, the initially used format arrangement shall be used for all subsequent submissions.
- 10.2 <u>Content</u>. The Engineering and Technical Services Accomplishment Report shall (a) cover the progress on each active Engineering Services Memorandum (ESM) and (b) delineate the following:
- 10.2.1 Contract number.

1: ~ · · ·

10.2.2 Contract services authority date and serial number.

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- 10.2.3 Location where services were performed.
- 10.2.4 Names of contractor personnel performing the services.

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(Continued on Page 2)

# 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

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# Block 3, Description/Purpose (Continued)

3.2 The report provides advice, instruction, or training on how to install, maintain, and operate weapons, equipments and systems in a high state of readiness.

# Block 10, Preparation Instructions (Continued) -

- 10.2.5 Date services were performed and number of man days or man hours experienced.
- 10.2.6 Name of the procuring activity's technical representative (or designated technical representative) present during performance of the services.
- 10.2.7 Table of Contents (List all ESMs).
- 10.2.8 A statement of each ESM summarizing the work accomplished and objectives attained to the last day of the reporting period. This statement shall also reflect progress versus planned milestone objectives and projections of work accomplishment.
- 10.2.9 A statement as to whether any change to the item or procedures under consideration will necessitate changes on other system hardware or other procedures. Any changes to other system hardware or procedures, which are necessitated by the proposed change, shall identify the item(s) or procedures affected, the estimated cost, the part number and all other pertinent information.
- 10.2.10 A summary of the work objectives and work to be accomplished during the next reporting period.
- 10.2.11 A statement on the reasons for any delay of work which occurred and the effect of the delay on the overall program. Whenever delays occur, this statement shall furnish a revised completion date and cost of the ESM.
- 10.2.12 A statement of significant problems encountered and corrective action taken or recommended.
- 10.2.13 Recommendations, if any.
- 10.2.14 Remarks.
- 10.2.15 A listing of trips made during the reporting period in conjunction with fulfilling the requirements of this contract. This listing shall state where and when the trip was made, who was contacted, state the objectives of each trip and the degree of accomplishment of each objective.

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Page 2 of 3 Pages

197

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- Block 10, Preparation Instructions (Continued)
- 10.2.16 A summary of any recommended change revisions to existing technical manuals and plans. Describe the contractor's technical efforts and list any required spare parts installed in the repair or adjustment of any equipment or system.
- 10.2.17 When an ESM contains repetitive work (e.g., preparation or revision of new drawings or specifications, packaging data sheets, Engineering Change Proposals (ECP), etc.), a summary of work units, by relative major and minor effort shall be included in the report for such ESMs. The summary shall provide the number of units received and completed during the reporting period, and the cumulative number of units completed to date.
- 10.2.18 When an ESM is completed or cancelled, the Engineering and Technical Services Accomplishment Report shall state that this completes all effort under this ESM.

DATA ITEM	DESCRIPTION			Form Approved OMB No. 0704-0188
STATUS REPORT			DENTIFICATION NU I-MGMT- 80368	
3.1 The Status Report documents contract objectives. It identifies and compares the status achieved to by the Government to monitor and every contract of the	; accompilishments n nlanned goals a	nd the resou	rces expende	
S. OFFICE OF PRIMARY (YYMMOD) 870608 7. APPLICATION/INTERRELATIONSHIP	RESPONSIBILITY (OPR)  G/T213	6a	. DTIC APPLICABLE	6b. GIDEP APPLICABLE .
7.1 This data item description instructions for the data product as delineated in the contract.  7.2 It is not intended that all program. Portions of this DID a specific status reporting requirem	the requirement	specific and s herein sl	nould be app	olied to every
3. APPROVAL LIMITATION	9a. APPLICABLI	FORMS	91	G4130
on the first page of the report.  a. Title/identification of b. Type of report (e.g., more c. Period covered by the red. Contract number.  e. Preparing activity or conf. Security classification, g. Distribution Statement	nthly, interim, f port. ntractor's title. when required.	ent/program/ inal).	project.	
10.1.2 Page size. The report  10.2 Content. The report shall of			Herry Horrs	AT, paper,
10.2.1 Summary. The summary status, covering the accomplishe efforts, summary results of efformations, and recommended solutions	hall include a bed technical actors, identificates.	orief statem ivities and ion of major	problems/de	eficiencies with
10.2.2 Body of report. The Sapplicable:	Status Report sha	all contain	(Continued	on Page 2)
	ved for public re	lease; dist	ibution is v	unlimited.
DD Form 1664, JUN 86	Previous editions are obsc	lete.		PAGE 1 OF 3 PAGE

# DI-MGMT-80368 MG **=** 9999989 0008596 2 **=**

### DI-MGMT-80368

# Block 7, Application/Interrelationship (Continued)

- 7.3 This DID is related to DI-FNCL-80331, Funds and Man-Hour Expenditure Report which can be used in conjunction with this report if Block 10 paragraph 10.2.2.3 below is deleted.
- 7.4 This data item description supersedes DI-A-5004A, DI-A-5008A, DI-A-5028, and DI-E-5039B.

# Block 10, Preparation Instructions (Continued)

- 10.2.2.1 Milestone/task status. The status of each milestone/task as defined by the statement of work or contract, as applicable:
- a. A statement as to whether or not the program/project/task is on schedule; if not, the effort planned to meet the schedule shall be indicated. Include an overall status of each milestone, task, or unit of work. Include updated schedule sheets, milestone charts, or task synopsis sheets identifying phase of task and percentage of completion of each task, technical instruction, or order.
- b. A comparison of achieved end-product performance capabilities projected against contract baseline values, requirements, or allocations.
- c. Effort expended on each task to date, and a brief description of technical developments and accomplishments.
- d. Key dates in any testing program and a description of tests performed and significant test results. If applicable, a description of the amount and type of down time on the equipment or system under test.
- e. A list of all designs completed and a brief description of each item. For designs in process, provide estimated dates for design and drawing completion.
- f. A narrative of outstanding problems existing as of the previous status report, and their resolution status.
- g. New problem areas encountered or anticipated, their effect on the overall work effort/project, and steps being taken to remedy problem situations.
- h. Significant results of conferences, trips, or directives from the Contracting officer's representatives.
- i. Any other information which may cause significant changes in the program schedule.
- 10.2.2.2 Future plans. Summary of future plans, recommendations and proposals both for the next reporting period and for any long term plans.
- 10.2.2.3 Itemized man-hours and costs. Itemized man-hour and cost expenditure incurred for the reporting period by category and task, total contractual expenditures, and funds remaining as of the reporting date.

Page 2 of 3 Pages

# DI-MGMT-80368 MG 🖿 9999989 0008597 4 🖩

# DI-MGMT-80368

- Block 10, Preparation Instructions (Continued)
- 10.2.2.4 Contract deliveries status. The status of each deliverable end item, including data deliveries, as required by the contract. Provide item and contract identification, shipping/transmittal data; acceptance status, security classification, and scheduled due date information.
- 10.2.2.5 Report preparer. Name of person(s) preparing report and telephone number(s).
- 10.2.3 Appendices. Appendices, where applicable, for tables, references, charts, or other descriptive material. Each appendix shall be identified and referenced in the appropriate area of the report.

Page 3 of 3 Pages

Form Approved OMB No. 0704-0188

1 TITLE

2. IDENTIFICATION NUMBER

Certification/Data Report

DI-MISC-80678

### 3. DESCRIPTION / PURPOSE

3.1 Certification data is required to verify that specific qualifications have been obtained, tests have been performed, parts/assemblies/equipments/systems have been installed. tested, inspected and are ready for operation; that personnel have specific qualifications to perform assignments/operations/inspections; or to certify identicality, interchangeability, (Continued on page 2.)

4. APPROVAL DATE 880912

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) N/SEA 5523

68. DTIC APPLICABLE 66. GIDEP APPLICABLE

7. APPLICATION/INTERRELATIONSHIP

- 7.1 Certification may be required for a single event/operation, or may be required for a specified time period, or certification may be required on a continuing basis with periodic re-certification or updating of the original certification.
- 7.2 The technical content requirements for this item shall be specified in the contract. When this DID is applied to contracts acquiring items via a military specification prepared in accordance with MIL-STD-961, the necessary detailed technical requirements shall be (Continued on page 2.)

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

96 AMSC NUMBER

N4533

### 10. PREPARATION INSTRUCTIONS

- 10.1 Format. The report shall be typewritten in narrative format on the contractor's form. The report shall cover the type of certification specified in Block 3, "Subtitle," of the CDRL, DD Form 1423.
- 10.2 Content. The report shall contain the contract number and data item sequence number, and shall contain a statement that specifically identifies the purpose and applicability of this certification.
- 10.2.1 Certification of completion. Certification that tests have been performed, inspections made, parts/assemblies/equipments/systems have been installed, tested, inspected, and area ready for operation, or that specific qualifications have been obtained shall provide objective evidence in support of the certification. Objective evidence may include such items as spectographs, radiographs, material sampling, analysis, inspection and testing reports, or any other necessary documentation.
- 10.2.2 Certification of personnel. Certifications that personnel have specific qualifications shall be supported by licenses, permits, tests, statements of competency, or other documentation. The specific capabilities to perform an assignment, inspection, or other operations shall be stated in the certification.
- 10.2.3 Certification of data reviews. Certifications that documentation/data has been reviewed shall contain a statement of the "depth" of the examination and the results thereof. If the documentation being reviewed cannot be certified, the report shall so state and shall list the reasons, i.e., deficiencies, conflicting data, etc.

(Continued on page 2.)

11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

# Block 3, Description/Purpose (Continued)

compatibility, reliability, or completeness of documentation being prepared or reviewed by a contractor. The technical effort involved will be the result of equipment/procurement specification requirements.

# Block 7, Application/Interrelationship (Continued)

prepared as an appendix to the military specification entitled "Certification Data/Report Technical Content Requirements." The appropriate paragraph in block 10 herein, i.e., 10.3.1 or 10.3.2 shall be specified on the DD Form 1423, Contract Data Requirements List (CDRL).

7.3 This DID supersedes UDI-A-23264B.

Block 10, Preparation Instructions (Continued)

10.2.4 <u>Certification of compliance</u>. Certification of compliance to specific specification requirements shall be a statement to the effect that the contractor has complied.

# 10.3 <u>Technical content</u>.

- 10.3.1 The technical content shall be in accordance with the appendix entitled "Certification Data/Report Technical Content Requirements," contained in the applicable military specification as stated in the DD Form 1423, Contract Data Requirements List.
- 10.3.2 The technical content shall be as specified on the DD Form 1423, Contract Data Requirements List.
- 10.4 <u>Supplemental information</u>. Additional specific material, drawings, sketches, photographs, etc., in support of these certifications shall be as defined in the DD Form 1423.
- 10.5 <u>Signature</u>. The certification report shall be signed by the contractor's authorized representative responsible for insuring that the equipment being delivered/service being performed is in accordance with contract requirements.

Farm Approved
OMB No. 0704-0188

Public occurring burgers for this collection of information is estimated to everage 110 nours per residence including the time for reviewing instructions, searching data source, data review and terminate or an extension of information. Send comments regarding this automate or any other electric of information. Send comments regarding this automate or any other electric of information. Send comments regarding this automate electric of information containing, suppressions now for electric or an expert of information containing, suppressions now for electric or elect

1 TITLE

2. IDENTIFICATION NUMBER

PLANNED MAINTENANCE SYSTEM (PMS) FUNCTIONAL FAILURE ANALYSIS (FFA)

DI-MNTY-80981

- 3 DESCRIPTION/PURPOSE
  - 3.1 The Planned Maintenance System (PMS) Functional Failure Analysis (FFA) defines what constitutes a functional failure.

4 APPROVAL DATE (YYMMDD)	5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)	6a DTIC APPLICABLE	66. GIDEP APPLICABLE
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- 7 APPLICATION/INTERRELATIONSHIP
  - 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the PMS Functional Failure Analysis resulting from the work task described by 3.7.3 of MIL-P-24534 (Navy).
  - 7.2 This DID is related to DI-MNTY-80994, Planned Maintenance System Functional Block Diagram; DI-MNTY-80979, Planned Maintenance System

(Continued on Page 2)

8 APPROVAL LIMITATION 9. APPLICABLE FORMS 90 AMSC NUMBER
N4935

# 10 PREPARATION INSTRUCTIONS

- 10.1 Format. The PMS Functional Failure Analysis (FFA) shall be documented using contractor format.
- 10.2 Content. The analysis shall contain the following:
- 10.2.1 <u>ESWBS number</u>. Duplicate each Expanded Ship Work Breakdown Structure (ESWBS) entry in the Master Systems and Subsystems Index.
- 10.2.2 <u>Nomenclature</u>. Enter the nomenclature used on the Master Systems and Subsystems Index for the selected system or subsystem.
- 10.2.3 <u>Ship class</u>. Duplicate the entries on the Master Systems and Subsystems Index.
- 10.2.4 Prepared by. Enter the analyst's name and the date.
- 10.2.5 Reviewed by. Enter the first level reviewer's name and the date.

(Continued on Page 2)

# 11. DISTRIBUTION STATEMENT

Distribution Statement A: Approved for public release; distribution is unlimited.

# 7. Application/Interrelationship (Continued)

Master System and Subsystem Index: DI-MNTY-80980, Planned Maintenance System Failure Modes and Effects Analysis; DI-MNTY-80982, Planned Maintenance System Functionally Significant Items Index; DI-MNTY-80983, Planned Maintenance System Additional Functionally Significant Item Index Selection Report: DI-MNTY-80984, Planned Maintenance System Logic Tree Analysis With Supporting Rationale and Justification; DI-MNTY-80985, Planned Maintenance System Servicing and Lubrication Analysis; DI-MNTY-80986, Planned Maintenance System Requirement Index: DI-MNTY-80987, Planned Maintenance System Procedure Evaluation Sheet: DI-MNTY-80988, Planned Maintenance System Task Definition; DI-MNTY-80989, Planned Maintenance System Inactive Equipment Maintenance Requirement Analysis; DI-MNTY-80990, Planned Maintenance System Reliability Centered Maintenance Documentation Control Sheet: DI-MNTY-80991, Planned Maintenance System Maintenance Requirement Card; DI-MNTY-80992, Planned Maintenance System Maintenance Index Page; DI-MNTY-80993, Planned Maintenance System Quality Assurance Check Sheet.

- 7.3 This DID requires data to be provided to the Government Information Data Exchange Program (GIDEP) at the following address: Program Director, GIDEP Operations Center Corona, CA 91720-5000
- 10. Preparation Instructions (Continued)
  - 10.2.6 Approved by. Reserved for the PMS coordinating activity approval signature and the date.
  - 10.2.7 Revision. Enter Original, A, B or C, sequentially and the date.
  - 10.2.8 <u>Sources of information</u>. Enter the drawing, manual, document and report numbers. Enter titles of reference material actually used in this analysis.
  - 10.2.9 <u>Description</u>. Referring to the block diagram prepared in phase 1, enter a brief physical and functional description of the subdivision. Focus on what the hardware is and what it does, oriented toward preventive maintenance needs. After this narrative, document the following specific information about the system, containing the following (parenthetical statements describe the information to be documented):
    - a. REDUNDANCY: Enter "None" or describe the redundant relationship.
    - b. PROTECTIVE DEVICES: List the protective devices and the circumstances under which they operate; for example, circuit breaker 30 amp, casing relief valve lifts at 150 pounds per square inch (lb/in'), reseats at 135 (llb/in').
    - c. SAFETY FEATURES: Describe special safety features such as interlocks.
    - d. FAIL SAFE OR UNSAFE FEATURES: State whether system is fail safe or unsafe; describe any fail safe features.

### DI-MNTY-80981

- 10. Preparation Instructions (Continued)
  - e. CONDITION INDICATORS: Document TYPE, INDICATES, and TO WHOM in a single group for each indicator.
    - (1) TYPE: Enter gauge, thermometer, meter, bite, indicator light, audible visual alarms, as appropriate.
    - (2) INDICATES: Describe what the indicator tells about the system.
    - (3) TO WHOM: List the watch station or the title of the operator who observes the indicator. Specify the conditions when that station is manned.
  - f. ENVIRONMENT: Describe the environment to which the system is exposed; for example, exposed to weather, exposed to high humidity, exposed to high heat, or other.
  - g. DUTY CYCLE: Describe the particulars of normal operational practices and estimated operational time per year. For example, The system is normally on line when underway and is automatically controlled. Air compressors cycle ON and OFF under control of associated receiver pressure switches. Compressors run about 250 hours a year, depending on demand.
  - h. USE RESTRICTIONS: Enter, in capital letters, any special restrictions on the operation of the system; for example, CANNOT BE SAFELY ACTIVATED IN PORT.
  - i. SPECIAL MAINTENANCE FEATURES: Describe any special provisions for maintenance installed; for example, System is equipped with external test connections enableing full diagnostics while on line.
  - 10.2.10 <u>Functions and out interfaces</u>. Enter a description of functions of the system. Include self or crew protective features, out interfaces and all cofunctions. State minimum operational function parameters or performance standards if appropriate. Number functions sequentially; for example, 1, 2, and 3.
  - 10.2.11 <u>System in interface</u>. Enter sources of input and critical values. Specify the ESWBS number for each source.
  - 10.2.12 <u>Functional failures</u>. Enter the definition of what constitutes a failure for each function and output interface listed in 10.2.10. There may be several functional failures for each function; all functional failures must be identified. Number each functional failure 1.1, 1.2, 1.3, 2.1, 2.2, and 2.3 to correspond to the function number in 10.2.10.
  - 10.2.13 <u>Serial number</u>. Enter a four-segment serial number as follows:
    - a. Segment 1 Enter the developing organization abbreviation followed by a slant (/).
    - E. Segment 2 For developers, enter the development authorization number followed by a slant (/): for other

# DI-MNTY-80981

# 10. Preparation Instructions (Continued)

1

development activities, assign a development number followed by a slant (/).

- c. Segment 3 Enter the number 116, indicating the FFA, followed by a slant (/).
  - d. Segment 4 Enter the ESWBS number from 10.2.1.

Form Approved OMB No. 0704-0188

TITLE

2. IDENTIFICATION NUMBER

TEST FLAN

DI-NDTI-80566

- 3. DESCRIPTION/PURPOSE
- 3.1 The Test Plan outlines the plans and performance objectives at every level of testing on systems or equipment. It provides the procuring activity with the test concept, objectives and requirements to be satisfied, test methods, elements, responsible activities associated with the testing. measures required, and recording procedures to be used.
- 4. APPROVAL DATE (CICIMMYY) 880413
- 5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) G/T213

6a. DTIC

6b. GIDEF APPLICABLE APPLICABLE

- 7. APPLICATION/INTERRELATIONSHIP
- The Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the contract.
- 7.2 This DID is applicable to system and equipment tests that include design evaluation tests, engineering tests, preliminary qualification tests, formal qualification tests, human factor tests, operational tests and acceptance tests. (Continued on Page 2)
- 8. APPROVAL LIMITATION

9a. APPLICABLE FORMS 9b. AMSC NUMBER

G4379

- O. PREPARATION INSTRUCTIONS
- 10.1 General. The test plan shall document in detail the contractor's plan for conducting tests and analyzing the test results to show how the system, when fielded, will satisfy the requirements of the applicable design specification.
- 10.2 Format. The plan shall be in the contractor's format.
- 10.3 Content.
- 10.3.1 Title page. The title page shall include the following:
  - Title of the test to be conducted.
  - Identification of system being tested. b.
  - Contractor's name. C.,
  - Contract number. d.
  - ⇔ . Security classification.
  - Distribution statement.
- 10.3.2 Introduction. Consists of an overview of the objectives of the test plan, including flow diagrams, milestones, personnel participation, locations, schedules, and security measures to be observed. The plan shall include the following:

(Continued on Page 2)

1. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release: distribution is unlimited.

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Page 1 of 3 Pages

### DI-NDTI-80566

# Block 7, APPLICATION/INTERRALATIONSHIP (continued)

7.3 This DID supersedes DI-T-5204.

# Block 10, PREPARATION INSTRUCTIONS (continued)

- 10.3.3 <u>Flow Diagrams</u>. The flow diagrams will reflect a functional description of the test program using a block diagram portrayal of the functions that must be met to satisfy the total test program. Functions shall be numbered 1.0, 2.0, 3.0, etc.
- 10.3.4 <u>Milestones</u>. Identifies the start and expected completion dates of each test to be performed.
- 10.3.5 <u>Participation</u>. Identifies the government and contractor participation roles and responsibilities.
- 10.3.6 <u>Location</u>. Identifies the facilities where the testing will be performed.
- 10.3.7 <u>Schedule</u>. States when testing will be performed, whether testing is on schedule, and if not, what procedures will be taken to meet the schedule.
- 10.3.8 <u>Security.</u> Identify and state briefly any security measures or quidelines to be observed.
- 10.3.7 Master test list. Lists all tests to be accomplished in the order they are to be performed. A separate listing for each location shall be provided. Each listing shall include the following:
- 10.3.9.1 <u>Test description</u>. Name and brief description of test to be performed.
- 10.3.9.2 <u>Applicable specification(s)</u>. The specifications shall be identified as follows:
  - a. Title and identification number.
  - b. Paragraph number associated with the test.
  - c. Title of test.
  - d. Functional category of test.
- 10.3.9.3  $\underline{\text{Parameters.}}$  The number of cycles the test will be performed and selected parameters to be observed.
- 10.3.9.4 <u>Special tests</u>. Provides a list of special or unusual tests and examinations necessary to verify satisfactory equipment performance to specifications.

Page 2 of 3 Pages



### DI-NDTI-80566

- lock 10, PREPARATION INSTRUCTIONS (continued)
- 10.3.9.5 <u>Test classification category.</u> State the functional area of each test performed.
- 10.3.9.6 <u>Test Objectives.</u> Describes the objective of each test performed, including the criteria, baseline, duration, and number of times each test should be performed.
  - a. Success/failure criteria.
  - b. Baseline.
  - c. Duration.
  - d. Quantity of test.
- 10.3.9.7 <u>Test equipment.</u> List all equipment to be used in the test and identify as follows:
  - a. Description.
  - b. Nomenclature
  - c. Serial number.
- 10.3.9.8 <u>Support equipment.</u> List all support equipment that will be used to perform the tests and identify as follows:
  - a. Description.
  - b. Nomenclature
  - c. Serial Number.
  - d. Calibration constants.
  - e. Calibration procedures.
  - f. Operating instructions.
- 10.3.9.9 Special test equipment. List all special test equipment required to be designed or fabricated for use on the program as follows:
  - a. Description.
  - b. Nomenclature.
  - c. Date required.
- 10.3.9.10 Approach. Describes the steps used to perform each test.
- 10.3.9.11 <u>Instrumentation</u>. Indicates the type and recording devices that will be used and the number and types of parameters to be recorded.
- 10.3.9.12 <u>Data reduction and analysis</u>. Describes data to be recorded and the data reduction and analysis techniques that will be used to interpret the data.
- 10.3.9.13 <u>Government test facilities</u>. Identifies applicable facility and includes a reference to the appropriate facility requirements documents.
- 10.3.10 <u>Validation procedure.</u> An overview of the procedures that the potractor will use to validate the test results.

Page 3 of 3 Pages

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Form Approved OMB No. 0704-0188

1. TITLE

2. IDENTIFICATION NUMBER

TEST PROCEDURE

DI-NDTI-80603

3. DESCRIPTION/PURPOSE

3.1 The test procedure identifies the step-by-step testing operations to be performed on items under going developmental, qualification, or acceptance testing. It identifies items to be tested, the test equipment and support required, the test conditions to be imposed, the parameters to be measured, and the pass/fail criteria against which the test results (continued on page 2)

4. APPROVAL DATE (YYMMDD)

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

6a. DTIC APPLICABLE

6b. GIDEP APPLICABLE

880601

G/T2137

7. APPLICATION / INTERRELATIONSHIP

- 7.1 This Data Item Description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirements as delineated in the contract.
- 7.2 This DID is applicable to contracts requiring tests to be performed for the purpose of developmental or environmental evaluation, acceptance testing, and item qualification testing.

7.3 This DID supersedes DT-T-5248 and DT-T-5301

8. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

G4428

10. PREPARATION INSTRUCTIONS

- 10.1 Format Requirements. The test procedure shall be in the contractor's format on  $8\ 1/2\ x\ 11$  inch paper. It shall be bound in such a manner that pages may be removed or inserted without damage or mutilation.
- 10.2  $\underline{\text{Content requirements}}$ . The test procedure shall contain the following:
- 10.2.1 Front matter.
- 10.2.1.1 Cover and title page. The following information shall be included on the cover and title page:
  - a. Date of issue.
  - b. Revision date (If applicable).
  - c. Procedure document identification number.
  - d. Contract number.
  - e. Contractor's name and address.
  - f. Type of procedure, including purpose (e.g., first article test, developmental evaluation, qualification, environmental (specify), acceptance, or other).
  - J. Identification of the system, subsystem, or equipment to be tested.
  - be tested.

h. Security classification (if applicable)

(continued on page 2)

11. DISTRIBUTION STATEMENT

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Page 1 of 3 Pages 49/072

# DI-NDTI-80603

# Block 3. DESCRIPTION/PURPOSE

will be measured. The document is a compilation of individual test procedures for related elements of a system, subsystem, or equipment.

- Block 10. PREPARATION INSTRUCTIONS (continued)
- 10.2.1.2 Record of changes. A record of change pages shall be included to provide for tracking of changes to the test procedures.
- 10.2.1.3 <u>Table of contents</u>. A table of contents is required when more than one test procedure is included in the test procedures document. It shall identify the page location of each procedure number, procedure title, and related equipment nomenclature.
- 10.2.2 <u>Body of document</u>. For each test procedure, the following information is required:
- 10.2.2.1 Procedure number. Each procedure shall have an unique number assigned to it.
- 10.2.2.2 Title of procedure. The title should relate to the purpose of the test.
- 10.2.2.3 Introduction. The following shall be addressed in the introduction:
- 10.2.2.3.1 Purpose of test. (As specified in the contract tasking document.)
- 10.2.2.3.2 System, subsystem, or equipment to be tested. The following identification information shall be provided:
  - Nomenclature a.
  - b.
  - Model or part number.
    Type of test item (prototype, production item, laboratory model, etc.)
  - d. Applicable specification.
- 10.2.2.3.3 Test requirements. Includes the following, each related to the prescribing contract requirement paragraph (specification, standard, plan, or work statement).
  - Required tests, and parameters to be measured.
  - Performance requirements, acceptance or compliance limits, and environmental criteria.
- 10.2.2.3.4 Referenced documents. A list by title, number, date, and source of those documents cited in the test procedure.

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# DI-NDTI-80603 ND **= 9999989** 0001764 6

### DI-NDTI-80603

# Block 10. PREPARATION INSTRUCTIONS

- Required test equipment. Includes the following for each piece of test equipment required to perform the procedure:
  - a. Nomenclature.
  - Use of test equipment. b.

  - d.
  - e.
  - Model Number (if applicable).
    Manufacturer (if mandatory).
    Accuracy and calibration requirements.
    Range or spectrum of measurements required.
- 10.2.2.5 <u>Table of tests</u>. This table lists each test performed une procedure in the sequence it is to be performed, identified to the This table lists each test performed under the procedure paragraph and the related specification/contract requirement.
- The following shall be included for 10.2.2.6 Step-by-step procedure. each step of the test procedure:
  - Test set-up diagrams, including test equipment connections.
  - Input and output instrumentation points. b.
  - Test item operating limits and test conditions to be
  - Performance parameters to be measured. d.
  - Step-by-step operations to obtain the required data. e.
  - Caution and safety warnings as appropriate. f.
- 10.2.2.7 Data sheets. Data sheets shall be included with the procedure, or be separately attached at the end of all procedures. They shall provide for:
  - Identification of item tested, including model and serial a.
  - Recording of test measurements. b.
  - Identification of required or objective performance values, with tolerances.
  - Identification of applicable procedure paragraph. d.
  - Date of test. e.
  - Signature of technician or inspector performing the tests.
- Support requirements. Any special support requirements would be 10.2.2.8 included in this section, such as:
  - Use of special facilities or test ranges. a.
  - Personnel requirements (numbers, types, qualifications). b.
  - Unusual electrical, hydraulic, pneumatic, etc. requirements. c.
  - Support equipment requirements. d.

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Form Approved OMB No. 0704-0188

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to 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0180), Washington, DC 20503.

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2. IDENTIFICATION NUMBER

TEST/INSPECTION REPORT

DI-NDTI-80809B

# 3. DESCRIPTION/PURPOSE

3.1 The test/inspection report is used to document test/inspection results, findings, and analyses that will enable the government or contracting agency to evaluate compliance with system requirements, performance objectives, specifications, and test/inspection plans.

4. APPROVAL DATE (YYMMDD)

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

F/AFMC-DOP

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR)

F/AFMC-DOP

# 7. APPLICATION/INTERRELATIONSHIP

- 7.1 This data item description (DID) contains the format and content preparation instructions for the data product generated by the specific and discrete task requirement as delineated in the contract.
- 7.2 This DID is applicable to engineering (developmental), preliminary qualification, qualification, and acceptance testing.
- 7.3 This DID supersedes DI-NDTI-80809A and DI-MISC-80653.

8. APPROVAL LIMITATION 9a. APPLICABLE FORMS 9b. AMSC NUMBER

F 7 2 3 1

# 10. PREPARATION INSTRUCTIONS

- 10.1 <u>Format</u>. Contractor format is acceptable. Organize the information required by paragraph 10.2 and its subparagraphs in a manner that facilitates presentation and understanding
- 10.2 <u>Content</u>. The test/inspection report shall contain the following information, as applicable.
- 10.2.1 <u>Cover and title page</u>. The following information shall appear on the outside front cover and title page:
  - a. Report date.
  - b. Report number (contractor or government)
  - c. Contractor's name, address, and commercial and government entity code.
  - d. Contract number and contract line item number or sequence number (if applicable).
  - e. Type of test/inspection (for example, first article acceptance test, quality conformance inspection, developmental test, qualification test, environmental test).
    - f. Identification of item tested/inspected.
    - g. Date or period of test/inspection.
    - h. Name and address of requiring government activity.
    - i. Security classification, downgrading and declassifying information, if applicable.

(Continued on page 2)

11. DISTRIBUTION STATEMENT

STRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED.

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Previous editions are obsolete.

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### DI-NDTI-80809B

- Block 10, Preparation Instructions (continued)
- 10.2.2 <u>Table of contents</u>. The table of contents shall identify the following:
- a. The title and starting page of each major section, paragraph, and appendix of the report.
- b. The page, identifying number, and title of each illustration (for example; figure, table, photograph, chart, and drawing).
- 10.2.3 <u>Introduction</u>. The introduction shall include the following information:
- 10.2.3.1 <u>Test/inspection objective(s)</u>. The specific test/inspection objective(s) as specified in the contract tasking document.
- 10.2.3.2 <u>Item(s) tested/inspected</u>. Complete identification of the item(s) tested/inspected including the following:
  - a. Nomenclature.
  - b. National stock number.
  - c. Model number, part number, and serial number
- d. Type of item (for example, prototype, production item, laboratory model).
  - e. Serial or lot number.
    - f. Applicable engineering changes.
    - g. Production item specification, if applicable.
    - Date of manufacture.
- 10.2.3.3 <u>Test/inspection requirements</u>. Complete identification of the test/inspection requirements correlated to contractual requirements including the following:
  - a. Required test/inspection parameters.
- Performance requirements, acceptance or compliance limits, and environmental criteria.
- 10.2.4 <u>Summary</u>. Complete test/inspection report summary including the following:
- a. A brief discussion of the significant test/inspection results, observations, conclusions, and recommendations covered in greater detail elsewhere in the report.
- b. Proposed corrective actions and schedules for failures or problems encountered.
- c. Identification of deviations, departures, or limitations encountered, referenced to the contract requirements.
- d. Tables, graphs, illustrations, or charts as appropriate to simplify the summary data.
- 10.2.5 <u>Reference documents</u>. Complete identification of all documents referenced in the test/inspection report including the following, as applicable:
  - a. Prior test/inspection reports on the same item.
  - b. Test/inspection plans and procedure documents.
  - c. Prior certifications of compliance.
- d. Contractor's file designation where test/inspection records are maintained.
  - e. Input parameters used.

The applicable issue of the documents cited therein, including their approval dates and dates of any applicable amendments, notices, and revisions, shall be as specified in the contract.

# DI-NDTI-80809B

- The body of the test/inspection report shall be as 10.2.6 Body of report. follows:
- 10.2.6.1 Test equipment identification. Complete identification of each item of test equipment used in the test/inspection including the following:
  - a. Nomenclature.
  - b. Model number.
  - Serial number.
  - d. Manufacturer.
  - e. Calibration status.
  - f. Accuracy data.
  - g. Comments, if applicable.
- 10.2.6.2 Test/inspection facility installation and set-up. Complete description of the physical set-up used in conducting the test/inspection to include the following:
  - a. Location or orientation of the item.
- b. Location, orientation, or settings of test equipment and instrumentation.
  - c. Location, orientation, or settings of sensors and probes.
  - Location or orientation of interconnections, cables, and hoop-ups. Electrical power, pneumatic, fluidic, and hydraulic requirements. d.

Drawings, illustrations, and photographs may be used for clarification.

- 10.2.6.3 Test/inspection procedures. Complete description of the procedures used in conducting the test/inspection to include the following:
- Item selection and inspection that verified suitability for test/ inspection.
- b. Summarized sequence of testing/inspection steps, including a description of how the item was operated during the test/inspection, and any control conditions imposed.
- 10.2.6.4 <u>Test/inspection results and analysis</u>. A copy of all test/inspection results and analysis to include the following:
- 10.2.6.4.1 Recorded data. The actual recorded data (for example, log book entries, oscillographs, instrument readings, plotter graphs). If the recorded data is extensive, provide it in an appendix.
- Identification of all test/inspection 10.2.6.4.2 <u>Test/inspection results</u>. results to include the following:
- a. Matrices comparing results achieved against test/inspection objectives or requirements.
- b. A discussion of these matrices as to their significance, and how they compare to any prior test/inspections.
  - c. Calculation examples.
- d. Discussion of anomalies, deviations, discrepancies, or failures, including their impact, causes, and proposed corrective actions. The discussion shall address discrepancies between design requirements and the tested/inspected configuration.
- 10.2.6.5 <u>Conclusions</u>. Test/inspection conclusions distinguished between objective and subjective to include the following:
- The effectiveness of the test/inspection procedures in measuring item performance.

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### DI-NDTI-80809B

- b. The success or failure of the item to meet required test/inspection objectives.
  - c. The need for repeat, additional, or alternative tests/inspections.
  - d. The need for item redesign or further development.
- e. The need for improved test/inspection procedures, techniques, or facilities.
  - f. The adequacy and completeness of the test/inspection requirements.
- 10.2.6.6 <u>Recommendations</u>. Recommendations appropriate to the test/inspection results and conclusions including the following:
  - a. Acceptability of the item tested/inspected (pass or fail).
  - b. Additional testing/inspection required.
  - c. Redesign required.
  - d. Problem resolution.
  - e. Test/inspection procedure or facility improvements.
  - f. Disposition of items tested/inspected.
  - g. Documentation changes required.
  - h. Testing/inspection improvements.
- 10.2.7 <u>Authentication</u>. The following certifications shall be included, as applicable:
- 10.2.7.1 <u>Authentication of test/inspection results</u>. A statement that the test/inspection was performed in accordance with applicable test/inspection plans and procedures, and that the results are true and accurate. The authentication shall include the signature of the contractor personnel that performed the test(s)/inspection(s), a contractor representative authorized to make such certification, and any government witnesses.
- 10.2.7.2 <u>Authentication of prior validation</u>. A statement identifying those requirements not tested/inspected or measured that were previously validated. Include identification of the data and method employed for such validation (for example, prior test/inspection, analytical verification, equivalent item, and so on). The authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.
- 10.2.7.3 <u>Authentication of acceptability</u>. A statement that the item tested/inspected either passed or failed item acceptability requirements. This authentication shall include the signature of a contractor representative authorized to make such authentication and any government witness.
- 10.2.8 <u>Appendices</u>. Appendices shall be used to append detailed test/inspection data, drawings, photographs, or other documentation too voluminous to include in the main body of the report. This includes referenced documentation not previously provided by the government, and test/inspection reports from any associated test/inspection activity that may have performed some of the testing/inspecting requirements.

Form Approved OMB No. 0704-0188

2. TITLE

1. IDENTIFICATION NUMBER

Failure Summary and Analysis Report

DI-RELI-80255

### 3. DESCRIPTION / PURPOSE

3.1 This report presents a cumulative tabulation of failures that occur prior to and during the reporting period, describes analysis performed and encompasses individual Failed Item Analysis Reports prepared during the reporting period.

4. APPROVAL DATE (YYMMDD) 861017

5. OFFICE OF PRIMARY RESPONSIBILITY (OPR) EC

64. DTIC APPLICABLE | 6b. GIDEP APPLICABLE

7. APPLICATION / INTERRELATIONSHIP

- 7.1 This DID contains the format and content preparation instructions for the Failure Summary and Analysis Report requirements of Tasks 202, 301, 302 and 401 of MIL-STD-781D and Task 104 of MIL-STD-785B.
- 7.2 The report is used by the procuring activity to evaluate the contractor's failure reporting and analysis efforts.
- 7.3 This DID relates to DI-RELI-80253, Failed Item Analysis Report.
- 7.4 The Statement of Work must specify the appropriate task of MIL-STD-781 and MIL-STD-785 or a specific and discrete work task to develop this data product.

This DID supersedes DI-R-7041 and DI-R-5339

B. APPROVAL LIMITATION

9a. APPLICABLE FORMS

9b. AMSC NUMBER

N3987

# 10. PREPARATION INSTRUCTIONS

- 10.1 Reference documents. The applicable issue of documents cited herein, including their approval dates, and the dates of any applicable amendments and revisions shall be as reflected in the contract.
- 10.2 General. The report shall describe the results of the contractor's Failure Reporting, Analysis and Corrective Action System implementation required by the Statement of Work.
- 10.3 Content. The report may be prepared in the contractor's format and shall comprise three sections: (a) Failure Summary, (b) Failure Analysis, and (c) Failed Item Analysis Reports.
- 10.3.1 Failure Summary. The Failure Summary section shall consist of a cumulative tabulation of failure data obtained from individual failure reports. Failures which occurred during the latest report period shall be identified by suitable notation. The tabulation shall be arranged by subsystem or assembly, as applicable, and shall include the following data elements:
  - a. Failure number
  - b. Failure analysis number
  - c. Date of failure
  - d. Part name
  - e. Part number and symbol
  - f. Subassembly
  - g. Major assembly
  - h. Serial number of equipment

# 11. DISTRIBUTION STATEMENT

DISTRIBUTION STATEMENT A: Approved for public release; distribution is unlimited.

# DI-RELI-80255

# 10. PREPARATION INSTRUCTIONS (Cont'd)

- i. Hours of operation (component, equipment, total accumulated).
- j. Mode of operation (if applicable) when the failure occurred.k. Manufacturer of failed part.
- 1. Symptom of failures.
- m. Cause of failure.
- n. Repair action for test continuation.
- o. Categorization of failure.
- p. Result of failure (abort, degradation, etc.).
- q. The time to failure.
- 10.3.2 Failure Analysis. The Failure Analysis section shall consist of brief summaries for each of the Failed Item Analysis Reports, arranged by failure cause categories, such as the following:
  - a. Equipment design (ED).
  - b. Equipment manufacturing workmanship (EMW).
  - c. Part design (PD).
  - d. Part manufacturing workmanship (PMW).
  - e. Software errors (SE).
  - f. Unverified.
  - g. Intermittent failures.
  - h. Non-relevant failures.
- 10.3.3 Failed Item Analysis Reports. The Failed Item Analysis Reports section shall consist of a copy of each Failed Item Analysis Report used in the preparation of this report.